# Health Information Technology

# An Assessment of Freestanding Ambulatory Surgical Centers in Maryland

March 2010

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## **About the Survey**

The Maryland Health Care Commission (MHCC) developed the *Freestanding Ambulatory Surgical Center Health Information Technology Survey* (survey) to assess health information technology (health IT) adoption among the 325 Freestanding Ambulatory Surgical Centers (FASCs or Centers) in Maryland. The survey is unique to Maryland and identifies the overall level of health IT adoption and planning. This report provides an aggregate perspective and also reports adoption by geographic location and specialty. The MHCC developed the survey in collaboration with the Maryland Ambulatory Surgical Association (MASA). The survey focuses on computerized physician order entry, electronic health records, electronic medication administration records, barcode medication administration, infection surveillance software, electronic prescribing, and electronic health information exchange. FASCs were asked to complete the survey as part of the annual *Maryland Freestanding Ambulatory Surgical Center Survey*.

## **Report Limitations**

The primary limitation of the survey is that it reports on FASC adoption of health IT and does not measure Center use of the different applications. A second limitation is that the information used to develop the report was obtained from survey responses submitted by Centers where different interpretations of the questions could have influenced the response. Comparison information for FASCs on the national level is not available.

## Acknowledgements

The MHCC appreciates the effort put forth by the FASCs in completing the survey. The assistance provided by the MASA in developing the survey and in finalizing the report is laudable. The MASA's high level of enthusiasm for health IT adoption and meaningful use is noteworthy.

## **Freestanding Ambulatory Surgical Centers**

The Maryland Health Care Commission (MHCC) developed the *Freestanding Ambulatory Surgical Center Health Information Technology Survey* (survey)<sup>1,2</sup> to evaluate the level of adoption and planning efforts related to health information technology (health IT) among the state's 325 *Freestanding Ambulatory Surgical Centers* (FASCs or Centers). The MHCC developed the survey in collaboration with the Maryland Ambulatory Surgical Center Association (MASA) and assessed key areas of health IT: computerized physician order entry, electronic health records, electronic medication administration records, barcode medication administration, infection surveillance software, electronic prescribing, and electronic health information exchange.

Health IT has the potential to improve the quality of care, prevent medical errors, and reduce health care costs.<sup>3</sup> Effective use and widespread adoption of technology is vital to transforming health care by enabling providers to better manage health information. Roughly 54 percent of all Centers report using technology to support patient care. Almost 34 percent report using health IT in the key areas referenced above. Overall, approximately 55 percent of FASCs are undecided in their use of health IT, while about 11 percent plan to assess or implement health IT in the coming months.

Use of Technology to Manage Patient Care (n=325)							
Yes	No						
176		149					
	Planning						
Assessing	Implen	nenting	Undecided				
20	10		119				

Use of Health IT (n=325)						
Yes No						
109		216				
Planning						
Assessing	Assessing Implementing					
25	12		179			

<sup>2</sup> See Appendix D for the 2009 Freestanding Ambulatory Surgical Center HIT Survey Results.

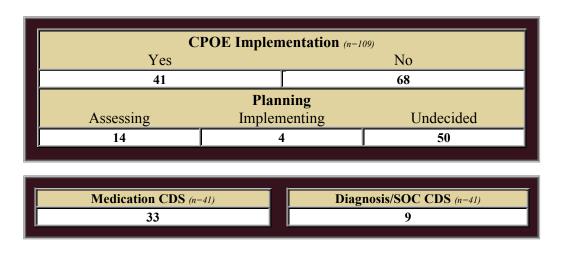
<sup>&</sup>lt;sup>1</sup> See Appendix B for the *Survey Questions*.

<sup>&</sup>lt;sup>3</sup> U.S. Department of Health and Human Services, *Health Information Technology*. Available at: <a href="http://healthit.hhs.gov/portal/server.pt">http://healthit.hhs.gov/portal/server.pt</a>.

## **Computerized Physician Order Entry**

The use of computerized physician order entry (CPOE)<sup>4</sup> decreases the number of errors associated with patient care orders by minimizing the amount of human intervention in the ordering process and increasing adherence to evidence-based guidelines.<sup>5</sup> CPOE enables the prescribing provider to enter patient care orders directly into the system. Providers that enter orders into a computer significantly reduce the potential for errors to occur that can result from the misinterpretation of hand-written orders. Approximately 38 percent of Centers using health IT report having CPOE capabilities, nearly 46 percent are undecided in their planning efforts, and around 17 percent plan to assess or implement CPOE in the future.<sup>6</sup>

Clinical decision support (CDS)<sup>7</sup> systems enhance the clinical decision making process of providers by furnishing simple facts and relationships to best practices for managing patients with specific disease states, new medical knowledge from clinical research, and other types of information at the point of care.<sup>8</sup> The value of CPOE is increased when CDS is integrated into the system.<sup>9</sup> Approximately 80 percent of Centers that have CPOE report using CDS for medication prescribing, which includes: drug to drug; drug to food; and contraindications for dose limits or diagnosis, allergies, age, weight, test results; among other things. Around 22 percent of the FASCs that have implemented CPOE report having CDS for diagnosis, standards of care (SOC), and chronic conditions.



<sup>4</sup> CPOE is a software application where providers with prescribing privileges enter patient care orders directly into the system [see *Glossary of Terms* in Appendix C].

<sup>7</sup> CDS is technology that provides evidence-based knowledge in the context of patient-specific data [see *Glossary of Terms* in Appendix C].

<sup>&</sup>lt;sup>5</sup> S. Eslami, N. F. de Keizer, and A. Abu-Hanna, "The Impact of Computerized Physician Medication Order Entry in Hospitalized Patients – A Systemic Review," *International Journal of Medical Informatics*, June 2008, 77(6):365-376. Available at: <a href="http://www.ijmijournal.com/article/S1386-5056(07)00169-4/abstract">http://www.ijmijournal.com/article/S1386-5056(07)00169-4/abstract</a>.

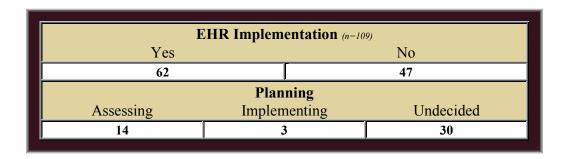
<sup>&</sup>lt;sup>6</sup> Values do not equal 100 due to rounding.

<sup>&</sup>lt;sup>8</sup> Amper, Politziner, and Mattia, LLP, Can IT Save the U.S. Health Care System: Connecting the Dots to Improve Patient Quality and Safety. Available at: <a href="http://www.amper.com/publications/IT-health-care-system.asp">http://www.amper.com/publications/IT-health-care-system.asp</a>.

<sup>&</sup>lt;sup>9</sup> Oregon Health & Science University, Welcome to CPOE.org. Available at: <a href="http://www.cpoe.org">http://www.cpoe.org</a>.

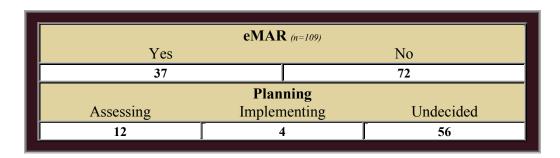
## **Electronic Health Records**

The electronic health record (EHR)<sup>10</sup> is a longitudinal electronic record of patient health information generated by encounters in any care delivery setting. EHRs contain patient demographics, progress notes, problem lists, medication history, vital signs, past medical history, immunizations, laboratory data, radiology reports, and any other information pertinent to one's health. EHRs support care delivery directly or indirectly through CDS, quality management, and outcomes reporting.<sup>11</sup> Roughly 57 percent of FASCs that have implemented health IT have EHRs, about 28 percent are undecided in their plans to adopt EHRs, and around 16 percent plan to assess or implement.<sup>12</sup>



## **Electronic Medication Administration Record**

Electronic medication administration records (eMARs)<sup>13</sup> have the ability to automate a variety of paper-based processes, and can reduce adverse drug events associated with transcription errors.<sup>14</sup> These systems include warnings that can prevent harmful medication errors and give providers a clear view of a patient's medication record. Around 34 percent of FASCs with health IT systems have adopted eMAR technology. More than half are undecided about adopting this technology and roughly 15 percent intend to assess or implement eMARs in 2010.



<sup>13</sup> An eMAR is an electronic record of medication administered to a patient during an encounter [see *Glossary of Terms* in Appendix C].

<sup>&</sup>lt;sup>10</sup> An EHR is an electronic record that contains patient health information [see *Glossary of Terms* in Appendix C].

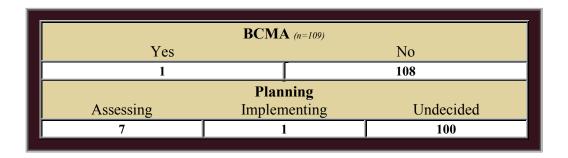
<sup>&</sup>lt;sup>11</sup> Health Information Management Systems Society (HIMSS), *Electronic Health Record*. Available at: <a href="http://www.himss.org/ASP/topics\_ehr.asp">http://www.himss.org/ASP/topics\_ehr.asp</a>.

<sup>&</sup>lt;sup>12</sup> Values do not equal 100 due to rounding.

<sup>&</sup>lt;sup>14</sup> The University of Sydney, *The Impact of Electronic Medication Administration Records (e-MAR) on Medication Administration Safety and Nurses' Work.* Available at: http://www.fhs.usyd.edu.au/hireu/research/current\_projects/project\_impact.shtml.

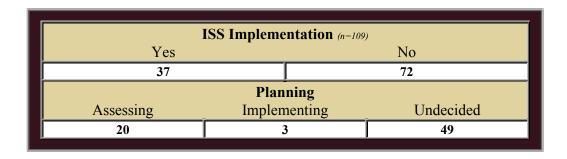
## **Barcode Medication Administration**

Barcode medication administration (BCMA)<sup>15</sup> is a point of care technology that helps prevent medication errors by electronically validating and documenting patient medication.<sup>16</sup> Scanning the barcode on the medication and on the patient's bracelet verifies that the right dose of the right medication is administered via the right route to the right patient at the right time. Nearly all Centers that use health IT have yet to adopt BCMA technology for medication administration. Around 7 percent report that they intend to assess or implement this technology, and almost 92 percent are undecided about adopting BCMA.



## **Infection Management**

Infection surveillance software (ISS)<sup>17</sup> can help FASCs avert the complications associated with the contraction of an infection following a procedure. When problems are detected, alerts are automatically sent to appropriate personnel. ISS gives providers the tools necessary to track post operative infection rates for the purpose of intercepting and better managing disease outbreaks. Around 34 percent of Centers that have adopted health IT report using ISS for infection tracking. About 45 percent are undecided and nearly 21 percent are assessing or implementing this technology.



1.

<sup>&</sup>lt;sup>15</sup> BCMA is technology that uses an infrared scan to the barcodes on the patient's bracelet and medication package [see *Glossary of Terms* in Appendix C].

Business Wire, Medsphere Successfully Implements Electronic Medication Administration Solution in West Virginia, January 27, 2009. Available at: <a href="http://www.allbusiness.com/health-care/health-care-facilities-nursing/11762808-1.html">http://www.allbusiness.com/health-care-facilities-nursing/11762808-1.html</a>.

<sup>&</sup>lt;sup>17</sup> ISS electronically monitors post-operative infections rates [see *Glossary of Terms* in Appendix C].

<sup>&</sup>lt;sup>18</sup> Executive Healthcare, *Infection Control Software: The Justification Has Never Been Greater*, Issue 7, November 20, 2009. Available at: <a href="http://www.executivehm.com/article/Infection-Control-Software-The-Justification-Has-Never-Been-Greater/">http://www.executivehm.com/article/Infection-Control-Software-The-Justification-Has-Never-Been-Greater/</a>.

## **Electronic Prescribing**

Electronic prescribing (e-prescribing)<sup>19</sup> is a viable solution to counter shortcomings of the current paper-based prescribing process through technology that links prescribers with pharmacies. This technology eliminates hand-writing illegibility, wrong dosing, and missed drug or drug-allergy reactions with integrated CDS systems.<sup>20,21</sup> Approximately 37 percent of Centers with health IT solutions e-prescribe discharge medications to community pharmacies. About 17 percent are assessing or planning to implement e-prescribing technology this year, while around 46 percent are undecided.



## **Data Exchange**

As part of the survey, Centers were asked to indicate if they were exchanging any electronic patient information with laboratories, diagnostic centers, and community providers. Approximately 40 percent of FASCs that have adopted health IT are capable of receiving select electronic laboratory data and about 13 percent are assessing or implementing this technology. Nearly 47 percent do not have plans in place to implement technology to connect with laboratories. Almost 28 percent have the capability to receive electronic data from diagnostic centers. While roughly 53 percent are uncertain about adopting this technology, approximately 18 percent are assessing or implementing this technology. Around 20 percent of FASCs reported sharing some electronic patient information with other providers. Roughly 69 percent of Centers are undecided in adopting data sharing technology and about 11 percent are assessing or implementing this technology.

<sup>&</sup>lt;sup>19</sup> e-Prescribing is the electronic transmission of discharge medications to a community pharmacy upon patient discharge [see *Glossary of Terms* in Appendix C].

<sup>&</sup>lt;sup>20</sup> U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services, *E-Prescribing Overview*. Available at: http://www.cms.hhs.gov/eprescribing/.

<sup>&</sup>lt;sup>21</sup> eHealth Initiative, *A Clinician's Guide to Electronic Prescribing*, October 2008. Available at: <a href="http://www.ama-assn.org/ama1/pub/upload/mm/472/electronic-e-prescribing.pdf">http://www.ama-assn.org/ama1/pub/upload/mm/472/electronic-e-prescribing.pdf</a>.

<sup>&</sup>lt;sup>22</sup> Values do not equal 100 due to rounding.

Data Sharing w/ Laboratories (n=109)							
Yes	~g		No				
44		65					
	Planning						
Assessing	Implen	nenting	Undecided				
9	5		51				

Data Sh	Data Sharing w/ Diagnostic Centers (n=109)							
Yes								
31		78						
	Plan	ning						
Assessing	Implen	nenting	Undecided					
14		5	58					

Data Sharing w/ Community Providers (n=109)						
Yes			No			
22		87				
Planning						
Assessing	Implen	nenting	Undecided			
7		5	75			

## Geography

Baltimore FASCs have higher adoption rates of health IT than the Capital and Other regions.<sup>23</sup> The Baltimore region consists of Baltimore City, Baltimore County, and adjacent counties. The Capital region includes those counties adjacent to Washington D.C. The remaining counties account for the Other region. For the most part, about 48 percent of the FASCs in the Baltimore region, almost 25 percent in the Capital region, and around 28 percent in the Other region have adopted health IT.

The Baltimore region reports CPOE at about 42 percent, which is roughly 2 percent more than the Other region and 16 percent more than the Capital region. The Capital region reported EHR adoption at roughly 67 percent, which is nearly 11 percent more than the Baltimore region and about 17 percent more than the Other region. e-Prescribing in the Baltimore region exceeds the Capital region by almost 20 percent and the Other region by nearly 16 percent. The Baltimore region reports eMARs at almost 40 percent, which is about 10 percent more than the Capital region and roughly 13 percent more than the Other region. ISS adoption in the Capital region is reported at about 44 percent. This is about 7 percent more than the Other region and almost 17 percent more than the Baltimore region.

The Baltimore region exceeds the Capital region and Other region in exchanging electronic patient information with laboratories and diagnostic centers. The Baltimore region, at nearly 46 percent, exceeded the Capital region by around 16 percent and the Other region by approximately 6 percent in exchanging some information electronically with laboratories. They also exceed the Capital region by almost 44 percent and the Other region by about 17 percent as it relates to exchanging information electronically with diagnostic centers. The Capital area FASCs reported adoption of technology to exchange some patient information with community providers at approximately 30 percent, which is 3 percent more than the Other region and around 18 percent more than the Baltimore region.

Health IT	Baltimore (n=52)			Capital (n=27)				Other (n=30)				
Functions	Adopted	Planning		Adopted	I	Plannin	g	Adopted	P	Planning	g	
	Taopeea	A	I	U	Tuopeeu	A	I	U	Taopica	A	I	U
СРОЕ	22	3	1	26	7	5	2	13	12	6	1	11
EHR	29	3	2	18	18	5	1	3	15	6	-	9
eMAR	21	1	3	27	8	5	-	14	8	6	1	15
BCMA	-	1	-	51	-	2	-	25	1	4	1	24
ISS	14	11	1	26	12	4	2	9	11	5	-	14
e-Prescribing	24	2	2	24	7	4	2	14	9	7	2	12
Laboratory	24	1	1	26	8	3	3	13	12	5	1	12
Radiology	23	2	-	27	-	4	4	19	8	8	2	12
Providers	6	-	2	44	8	1	2	16	8	6	1	15
			KEY	A = Assess	sing, I = Implementi	ing, and $U$ =	= Undecided					

<sup>&</sup>lt;sup>23</sup> See Appendix A for *Geographic Distribution by County*. Data retrieved from the U.S. Census Bureau. Available at: http://www.census.gov/population/www/metroareas/lists/historical/80mfips.txt.

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## **Specialty**

Health IT adoption among single specialty Centers exceeds the level of health IT adoption within multi-specialty Centers. In general, health IT adoption presents the same challenges for Centers as it does for most providers. These challenges relate to the cost associated with the hardware and software, disruption in workflows during the implementation process, and concerns over privacy and security. Single specialty Centers are typically connected to a provider practice, which often makes implementing health IT less challenging. In comparison, multi-specialty Centers are more complex in part due to the customization of the technology that is required to support the different provider types, among other things.

Single specialty Centers report CPOE adoption at roughly 44 percent, which exceeds multi-specialty Centers adoption by nearly 21 percent. EHR adoption among single specialty Centers, at around 65 percent, nearly doubles the adoption rate reported by the multi-specialty Centers. Single specialty Centers report eMAR adoption at approximately 41 percent, which exceeds multi-specialty Centers by nearly 25 percent. Adoption of e-prescribing in single specialty Centers is reported at around 47 percent, which is nearly 5 times greater than adoption reported by multi-specialty Centers. Multi-specialty Centers reported ISS adoption at approximately 55 percent, which exceeds single specialty Centers by around 29 percent.

Single specialty Centers surpassed multi-specialty Centers in the exchange of electronic patient information with laboratory and diagnostic centers. Single specialty Centers, at about 44 percent, exceed multi-specialty Centers by nearly 12 percent in the exchange of electronic laboratory information. At roughly 35 percent, single specialty Centers exceeds multi-specialty Centers by nearly 22 percent in exchanging electronic information with diagnostic centers. Approximately 26 percent of multi-specialty FASCs reported having a provider data exchange, which is about 8 percent more than single specialty Centers.

Health IT	Multi-Specialty (n=31)				Single Specialty (n=78)			
Functions	Adopted		Planning		Adopted	Planning		
1 unctions	ridopica	A	I	U	ridopica	A	I	U
СРОЕ	7	5	-	19	34	9	4	31
EHR	11	4	1	15	51	10	2	15
eMAR	5	5	-	21	32	7	4	35
BCMA	1	5	-	25	-	2	1	75
ISS	17	4	-	10	20	16	3	39
e-Prescribing	3	7	-	21	37	6	6	29
Laboratory	10	3	-	18	34	6	5	33
Radiology	4	7	1	19	27	7	5	39
Providers	8	1	-	22	14	6	5	53
		KE	Y: A = Assessing, I =	= Implementing, and	l U = Undecided			

## Closure

This is the first year that FASCs were asked to provide information related to health IT adoption as part of their *Maryland Freestanding Ambulatory Surgical Center Survey*. FASCs are slowly beginning to transform the way they provide health care through the adoption of health IT. Roughly 325 Centers responded to the survey and nearly 34 percent report adopting various health IT applications. The most important use of health IT in FASCs may be to help reduce medical errors of omission that result from gaps in provider knowledge or the failure to synthesize and apply that knowledge in care delivery. Health IT has the potential to enable changes in the way health care is provided by making it safer, less costly, and more efficient. The rate of health IT adoption in FASCs is expected to increase at a slower pace in part because of the lack of financial incentives. The financial incentives available to many providers for EHR adoption under the *American Recovery and Reinvestment Act of 2009* are not available to FASCs.

Centers must develop a strategy to adopt health IT and seek alternative ways to fund the implementation of the technology. Ideally, implementation goals should be established around decision, selection, pre-implementation, implementation, and post implementation activities. FASCs that adopt health IT need to develop an actionable vision outlining realistic goals for implementation. Developing a flexible change management strategy when implementing health IT is essential in order to minimize disruption in patient care and to take advantage of the efficiencies gained through health IT adoption. Inevitably, Centers will implement health IT to remain competitive and to take advantage of the efficiencies gained through the use of technology, along with improved patient outcomes.

# Appendix A

## **Geographic Distribution by County**

## **Baltimore**

Anne Arundel County

**Baltimore County** 

**Baltimore City** 

Carroll County

Harford County

**Howard County** 

## **Capital**

**Montgomery County** 

Prince George's County

## **Other**

Allegany County

**Calvert County** 

Caroline County

Cecil County

**Charles County** 

**Dorchester County** 

Frederick County

Garrett County

Kent County

Queen Anne's County

Somerset County

St. Mary's County

Talbot County

Washington County

Wicomico County

Worcester County

## Appendix B

## **Survey Questions**

Below is a summary of the 2009 Freestanding Ambulatory Surgical Health Information Technology Survey. FASCs were asked to answer a filter question to determine if the Center uses software applications to manage their patient workflow. The Planning Questions (refer to the end of the survey) were included in each section in the event that the FASC selected "no" to any question designated with: "If no, go to Planning Questions."

#### Overview

- 1. Do you use software applications designed to manage your Center's patient workflow? *If no, go to Planning Questions*.
- 2. What is the name of the vendor?

#### **Order Entry**

- 1. Does your Center have an order entry system where providers (MD, DO, NP, or PA) can electronically enter patient care orders? *If no, go to Planning Questions*.
- 2. Does this system allow providers to electronically view the status and results of orders entered electronically?
- 3. Does your system have an order set feature where a group of orders can be selected based upon problem or diagnosis?
- 4. Does this system offer decision support software for medication prescribing, including drug-drug; drug-food; contraindication/dose limit for diagnosis, allergies, age/weight, lab/radiology results?
  - a. Is this feature fully implemented and operationalized?
  - b. Does the software offer links to resources for reference?
  - c. Does this software require electronic documentation for overriding an interception?
- 5. Does this system offer decision support software for diagnosis, chronic conditions, and standards of care, including heart failure, diabetes, or other appropriate treatments pneumonia vaccination, flu shot, etc.?
  - a. Is this feature implemented and operationalized?
  - b. Does the software offer links to resources for reference?
  - c. Does this software require electronic documentation for overriding an interception?
- 6. Does the system have an active "read-back order" function for verbal/phone orders?

#### **Electronic Health Record (EHR)**

- 1. Does your Center have an EHR? If no, go to Planning Questions
- 2. Is this system CCHIT-certified?
- 3. Does your system allow review of previous admission data?

#### **Medication Administration**

- 1. Does your Center have an electronic medication administration record (eMAR)? *If no, answer Planning Questions*.
- 2. Does your hospital have a Barcode Medication Administration (BCMA) system for medication administration? *If no, answer Planning Questions*.
- 3. Does your hospital have a medication reconciliation system in place for admission, discharge, and changes in level of care? *If no, answer Planning Questions*.

#### **Postoperative Infection Tracking**

1. Does your Center use software to manage postoperative infection tracking? *If no, answer Planning Questions*.

#### **Health Information Exchange**

- 1. Does your Center electronically prescribe discharge medications directly to community pharmacies? *If no, answer Planning Questions*.
- 2. Does your Center have a bi-directional electronic interface with community laboratories? *If no, answer Planning Questions.*
- 3. Does your Center have a bi-directional electronic interface with diagnostic centers? *If no, answer Planning Questions.*
- 4. Does your Center have a system capable of electronic data exchange for consultation or transfer of care with outpatient providers?

#### **Planning Questions**

Planning questions were incorporated in all survey sections as appropriate.

1.	If no, is your Center:	
	a. Assessing	system within 12 months?
	b. Implementing a _	system within 12 months?

c. Undecided at this time?

## **Appendix C**

## **Glossary of Terms**

#### **Barcode Medication Administration (BCMA):**

Technology that allows for the real-time confirmation of the "five rights" - right patient, right medication, right dose, right route, and right time - for medication administration.

#### **CCHIT-certified:**

Certification Commission for Health Information Technology is a nationally recognized certification body for electronic health records and their networks.

### **Clinical Decision Support:**

Computer application to assist in clinical decisions by providing evidence-based knowledge in the context of patient-specific data.

#### **Computerized Physician Order Entry (CPOE):**

Computer-based application system for ordering providers (MD, DO, NP, or PA) to enter patient care orders at the point of care.

## **Electronic Health Record (EHR):**

A longitudinal collection of electronic health information that serves as a legal medical record, which includes documentation, vital signs, and assessments.

#### **Electronic Medication Administration Record (eMAR):**

An electronic format of the traditional paper-based medication administration record.

#### **Electronic Prescribing (e-prescribing):**

Electronic transmission of prescriptions directly to the dispensing pharmacy by the ordering provider.

#### **Health Information Exchange (HIE):**

Electronic movement of health-related information among organizations.

## **Health Information Technology (HIT; health IT):**

Technology used to maintain health information into electronic format.

#### **Infection Surveillance Software (ISS):**

An application that monitors the events of infectious disease.

#### **Order Set:**

A group of evidenced-based orders for specific diagnosis or problems.

# **Appendix D**

	A		Casa		C	2 - 14
Health IT	Aggregate		Geography		Spec	
	All FASCs	Capital	Baltimore	Other	Multi	Single
			Order Entry			
Yes	41	7	22	12	7	34
Planning Projections					<del>-</del>	
Assessing	14	5	3	6	5	9
Implementing Undecided	4 50	2 13	1 26	1 11	- 19	31
		13	20	11	19	31
<b>Clinical Decision Suppo</b> Medications	ırı					
Yes	33	4	17	12	7	26
No	8	3	5	0	0	8
Diagnosis	0					
Yes	9	4	0	5	2	7
No	32	3	22	7	5	27
110	_			(EIID C)		27
			th Record Syst		1	
Yes	62	18	29	15	11	51
Planning Projections	14	_	1 2	1 2	1	10
Assessing	14 3	5 1	3 2	6	1	10
Implementing Undecided	30	3	18	9	15	15
Олиссииси						13
				n Record (eMA		
Yes	37	8	21	8	5	32
Planning Projections			1	1		
Assessing	12	5	1	6	5	7
Implementing Undecided	4 56	- 14	3 27	15	21	35
Опаестаеа				_	21	33
	Bai	rcode Medicat	tion Administra	tion (BCMA)		
Yes	1	-	-	1	1	-
Planning Projections						
Assessing	7	2	1	4	5	2
Implementing	100	25	51	24	25	75
Undecided	100				25	/3
		Infection	Surveillance So	ftware		
Yes	37	12	14	11	17	20
Planning Projections						
Assessing	20	4	11	5	4	16
Implementing	3 49	2	1 26	- 14	10	3 39
Undecided	49				10	39
		Electronic Pr	escribing (e-pr	escribing)		
Yes	40	7	24	9	3	37
Planning Projections				T -	T =	
Assessing	13	4	2	7	7	6
Implementing Undecided	6 50	2 14	2 24	2 12	21	6 29
Опиестией						29
				boratories (HIE		
Yes	44	8	24	12	10	34
Planning Projections			1	T	T .	
Assessing	9	3	1	5	3	6
Implementing Undecided	5 51	3 13	26	1 12	18	5 33
<i>пиесией</i>	<u>.</u>					33
		ic Data Excha		ostic Centers (H		
Yes	31	-	23	8	4	27
Planning Projections						
Assessing	14	4	2	8	7	7
Implementing Undecided	6	4	- 27	2	1 19	5 39
∪паесіаеа	58	19	27	12	19	39
		tronic Data E	xchange with P	roviders (HIE)		
Yes	22	8	6	8	8	14
Planning Projections						
Assessing	7	1	-	6	1	6
Implementing Undecided	5	2	2	1	-	5
	75	16	44	15	22	53



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